

	United States Environmental Protection Agency Washington, DC 20460 Notice of Arrival of Pesticides and Devices	Send Completed Form to Appropriate Regional Office Listed in the Instructions for this Form.	OMB Control No. 2070-0020 Approval Expires 11/30/2016
Note: Read Instructions before completing form.			
Part I: To Be Completed by Importer of Record or Licensed Customs Broker			
1. Name and Complete Address of Licensed Customs Broker Expeditors International Attn: Brynn Wisz 849 Thomas Drive Bensenville, IL 60106 T:630-616-2318		2. Name and Complete Address of Importer of Record Nufarm Americas Inc. 11901 South Austin Avenue Alsip, IL 60803 T:708-377-1330	
<input checked="checked" type="checkbox"/> Return Form to this Address		<input type="checkbox"/> Return Form to this Address	
3. Name and Complete Address of Shipper Sichuan Leshan Fuhua Tongda Agro Chemical Tech Co. Ltd. Qiaogou Road Wutongqiao District Leshan City, Sichuan, China 614800		4. EPA Registration Number 35935-46	5. EPA Producer Establishment No. 83807-CHN-001
		6. Brand Name of Product GLYPHOSATE TECHNICAL	
7. Active Ingredients and Percentage of Each N-(phosphonomethyl)glycine 95%			
8. Unit Size 1,000 KG	9. Quantity 162 bags	10. Total Net Weight 162,000 Kgs	11. Country of Origin China
12. Port of Entry Chicago, Illinois		13. Name and Complete Address of Carrier Hanjin Ottawa	
14. Entry Number 231-8016948-8	15. Anticipated Entry Date 4/3/14		
17. Location of Goods for Examination after Importation Nufarm Americas, Inc. c/o Jacobson Warehouse 21399 Torrence Ave. Sauk Village, IL 60411 P: 708-753-0396		16. I assert that information constituting Confidential Business Information is shown in the above blocks numbered: (Note: Blocks 4, 5, 6, 7 are not entitled to CBI treatment—see Instructions)	
18. To be Completed for Pesticides without an EPA Registration Number (The following information is optional, but may expedite processing of the Notice of Arrival. Check all that apply and provide additional information as indicated)			
<input type="checkbox"/> 18a. A pesticide transferred between registered establishments operated by the same producer. Domestic Producer Establishment Number: _____			
<input type="checkbox"/> 18b. A pesticide transferred between registered establishments not operated by the same producer. Domestic Producer Establishment Number _____ EPA Registration Number of Product being Formulated, if applicable: _____			
<input type="checkbox"/> 18c. A pesticide distributed under an Experimental Use Permit. Experimental Use Permit Number: _____			
<input type="checkbox"/> 18d. A pesticide distributed for research and development purposes without an Experimental Use Permit.			
<input type="checkbox"/> 18e. A pesticide transferred solely for export. Domestic Producer Establishment Number: _____			
<input type="checkbox"/> 18f. A pesticide distributed under an emergency exemption. Emergency Exemption Number: _____			
<input type="checkbox"/> 18g. A pesticide transferred for the purposes of disposal.			
<input type="checkbox"/> 18h. Other. Provide an explanation including the intended use and a description of why the product is being imported into the United States in the Remarks (block 19).			

19. Remarks (Provide additional information here. It is recommended that a copy of the label affixed to the product be submitted with the NOA.).

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law

20. Printed Name of Importer of Record or
Licensed Customs Broker

Susan Wright

Telephone Number

708-377-1363

21. Signature of Importer of Record or Licensed
Customs Broker

Date Signed

3/21/14

Part II: To Be Completed by U.S. Environmental Protection Agency

Action to be taken by U.S. Customs and Border Protection



Release Shipment



Detain for Inspection

Release shipment to consignee under bond. Shipment must
be held intact pending inspection.

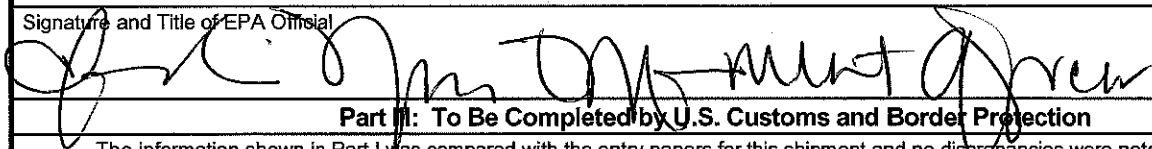
Other (Specify)

ENTRY NO. 231-8016948-8

Remarks

Signature and Title of EPA Official

Date

 3/24/14**Part III: To Be Completed by U.S. Customs and Border Protection**

The information shown in Part I was compared with the entry papers for this shipment and no discrepancies were noted. The shipment was handled as instructed by EPA in Part II. Any deviations should be brought to the attention of EPA before releasing shipment and should also be noted in "Remarks."

Remarks

Signature of District Director of Customs

Date

Paperwork Reduction Act Notice: The estimated average time to read the instructions and complete this form is 26 minutes. Send comments regarding the burden estimate or any other aspect of this collection of information to: Director, Collection Strategies Division, Office of Environmental Information (OEI), U.S. Environmental Protection Agency (Mail Code 2822), 1200 Pennsylvania Avenue, NW, Washington, DC 20460. Include OMB number 2070-0020 in any correspondence.

FOR MANUFACTURING USE ONLY

N-(phosphonomethyl)glycine.....	95.0%
OTHER INGREDIENTS:.....	<u>5.0%</u>

EPA Reg. No. 35935-46

KEEP OUT OF REACH OF CHILDREN

DANGER

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.

SEE BELOW FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS

For Chemical Spill, Leak, Fire, or Exposure,
Call CHEMTREC (800) 424-9300
For Medical Emergencies Only, Call (877) 325-1840

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CORROSIVE: CAUSES IRREVERSIBLE EYE DAMAGE... HARMFUL IF INHALED. Do not get in eyes or on clothing. Avoid breathing dust. Wear goggles or face shield. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove contaminated clothing and wash before reuse.

FIRST AID	
IF IN EYES	<ul style="list-style-type: none"> Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
IF SWALLOWED	<ul style="list-style-type: none"> Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
IF INHALED	<ul style="list-style-type: none"> Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
HOT LINE NUMBER Call with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.	
NOTE TO PHYSICIAN Probable mucosal damage may contraindicate the use of gastric lavage.	

ENVIRONMENTAL HAZARDS

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries or oceans, or other waters unless this product is specifically identified and addressed in an National Pollutant Discharge Elimination System (NPDES) permit. Do not discharge effluent containing this product into sewer systems without previously notifying the local sewerage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

PHYSICAL OR CHEMICAL HAZARDS

Solutions of this product should be mixed and stored using only stainless steel, aluminum, fiberglass, plastic and plastic-lined containers.

DO NOT MIX, STORE OR UTILIZE THIS PRODUCT OR SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL. (EXCEPT STAINLESS

STEEL CONTAINERS OR TANKS. This product or solutions of this product read with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious or personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read the entire label before using this product.

[illegible]

For use in the following glyphosate-tolerant crops: Roundup Ready Alfalfa; Roundup Ready Canola (Spring Varieties); Roundup Ready Canola (Winter Varieties); Roundup Ready Corn; Roundup Ready Corn 2; Field Corn Hybrids with Roundup Ready 2 Technology; Roundup Ready Cotton; Roundup Ready Flex Cotton; Roundup Ready Soybean; Roundup Ready 2 Yield Soybean; Roundup Ready Sugarbeet; Roundup Ready Sweet Corn; Sweet Corn Hybrids with Roundup Ready 2 Technology; Roundup Ready Wheat.

For the following uses, hemlockgrass releases broadcast and spot weed control chemical, moving cut during application, hollow stem injection, injection and trim, trim and edge, turfgrass renovation, site preparation, and other uses in, on or around the following sites: airfields; airports; alleys; lanes; trails & access ways; apartment complexes; aquatic sites; around commercial or industrial structures or outbuildings; around farm and ranch structures and outbuildings; around ornamental gardens; around ornamental trees & shrubs; bare ground; beaches; campgrounds; commercial sites; construction sites; CWP land; ditch banks; dormant pastures; highways; livestock, poultry, dog & ramp; dry ditches & canals; restoration & management areas; roadsides; forestry, golf courses; gravel yards; habitat rehabilitation; management areas; highways; industrial (including airports, medians, quarries & right of ways); industrial parks; non-wood tree sites; landscape areas; lumber yards; mulched areas; pastures; pastures; park and trails; shrub, vine, and ornamental production sites; other tank farms; pumping installations; parking areas; parks; paved & utility rights-of-way; power stations; pumping installations; and pipelines; power stations; railroad rights-of-way; railroads; rangelands; recreation areas and public areas; refineries; residential sites; resorts; rights-of-way; roadsides; schools; sidewalks; sports arenas; sports complexes; storage areas; substations; tennis courts; turf and grass seed production; utility sites; uncropped farmed areas; uncultivated non-agricultural areas; vacant lots; walkways; wastelands; wildlife food plots; wildlife habitat; agricultural areas; wetland trees, and other related sites.

This product may be used to formulate products for any additional uses not listed on this label if the formulator, user group, or grower has complied with U.S. EPA data submission requirements regarding the support of such use(s).

This product may be formulated for products to be used for experimental purposes that are in compliance with FIFRA.

STORAGE AND DISPOSAL

Do not contain acids, water, food or feed by storage or disposal.

PESTICIDE STORAGE: Keep containers closed to prevent spills and contamination.

PESTICIDE DISPOSAL: Wastes of this product may cause irreversible eye damage and may be dangerous. Improper disposal of excess pesticide or mixture is a violation of Federal law. If these wastes cannot be disposed of by use according to the label instructions, contact your State Pesticide or Environmental Control Agency, or the nearest EPA Regional Office for guidance.

Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING AND DISPOSAL: (This product is available in multiple containers. Follow the container disposal instructions below that apply to your container type.)

Nonrefillable Containers Without Outer Bag: Nonrefillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to dislodge clinging particles. Empty residue into processing equipment, then dispose of material in sanitary landfill or by incineration if allowed by state and local authorities; by burning, if burned stay out of smoke.

Nonrefillable Containers With Outer Bag: Nonrefillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into processing equipment, then dispose of liner in a sanitary landfill or by incineration if allowed by state and local authorities, by burning it. Burned stay out of smoke. Offer the outer bag for recycling, if available.

WARRANTY DISCLAIMER

The direction for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER OR SELLER MAKES NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO STATE OR USER, EITHER EXPRESS OR IMPLIED, OR BY THE USAGE OF TRADE STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE USE OR ELIGIBILITY OF THE PRODUCT, FOR ANY PARTICULAR TRADE USAGE, UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTUENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

LIMITATION OF LIABILITY

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL THE MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THEIR NATURE OF PUNITIVE DAMAGES, ARISING OUT OF THE SALE OF THE GOODS, INCLUDING DAMAGES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, HANDLING, AND DISPOSAL, TO THE EXTENT CONSISTENT WITH APPLICABLE LAW. MANUFACTURER OR SELLER SHALL NOT BE LIABLE TO BUYER OR USER, BY WAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF BUYER, IF BUYER OR USER INCURS DAMAGES OR SUITS OF MONEY, CLAIMS OR DEMANDS OF ANY KIND, INCLUDING REASONABLE ATTORNEY'S FEES, IN CONNECTION WITH ANY LITIGATION, RESULTING FROM OR BY REASON OF, OR ARISING OUT OF THE MISUSE OR FAILURE TO FOLLOW LABEL, WARNINGS OR INSTRUCTIONS FOR THE USE OF THE GOODS SOLD BY MANUFACTURER OR SELLER TO BUYER TO BE EXTENT CONSISTENT WITH APPLICABLE LAW. ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER, USER, OR ITS CUSTOMERS, TO THE EXTENT CONSISTENT WITH APPLICABLE LAW. BUYERS OR USER'S EXCLUSIVE REMEDY AGAINST THE MANUFACTURER OR SELLER OF THE GOODS, TO THE EXTENT NOT EXCEEDING THE COST OF THE PRODUCT.

If you do not agree with or do not accept any of the directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

MADE IN CHINA

NET WEIGHT: 2204.6 LB (1000 KG)

**Manufactured For
NUFARM LIMITED
4020 Aerial Center Parkway
Morrisville, NC 27560**





For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident,
Call CHEMTREC Day or Night: 1-800-424-9300.
For Medical Emergencies Only, Call 1-877-325-1840.

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Glyphosate Technical NUP-07163
Synonyms: Glyphosate; N-(phosphonomethyl) glycine
EPA Reg. No.: 35935-46
Company Name: Nufarm Limited
4020 Aerial Center Parkway
Morrsville, NC 27560
Date of Issue: December 11, 2013
Sections Revised: 1
Supersedes: October 21, 2011

2. HAZARDS IDENTIFICATION

Emergency Overview:

Appearance and Odor: White solid with slight odor.

Warning Statements: Keep out of reach of children. DANGER. CORROSIVE. CAUSES IRREVERSIBLE EYE DAMAGE. HARMFUL IF INHALED. Do not get in eyes or on clothing. Avoid breathing dust. Wear goggles or face shield. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove contaminated clothing and wash before reuse.

Potential Health Effects:

Likely Routes of Exposure: Eye and skin contact.

Eye Contact: Causes substantial but temporary eye injury.

Skin Contact: Slightly toxic based on toxicity studies.

Ingestion: Slightly toxic based on toxicity studies. No significant adverse health effects are expected to develop if only small amounts (less than a mouthful) are swallowed.

Inhalation: Low inhalation toxicity. Inhalation of dusts may cause coughing and sneezing.

Medical Conditions Aggravated by Exposure: Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

See Section 11: TOXICOLOGICAL INFORMATION for more information.

Potential Environmental Effects: Available data on similar formulations suggest that this product would be slightly to moderately toxic to aquatic organisms and practically non-toxic to avian species, honeybees and earthworms.

See Section 12: ECOLOGICAL INFORMATION for more information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS NO.	% BY WEIGHT
N-(phosphonomethyl) glycine	1071-83-6	95.0
Other Ingredients		5.0

4. FIRST AID MEASURES

If in Eyes: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If Swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

If on Skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE FIGHTING MEASURES

Flash Point: Not applicable

Autoignition Temperature: Not applicable

Flammability Limits: Not applicable

Extinguishing Media: In case of fire, use water (flood with water), dry chemical, carbon dioxide, or alcohol foam.

Special Fire Fighting Procedures: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full fire-fighting turn out gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Unusual Fire and Explosion Hazards: If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies. Dispose of fire control water later. This product reacts with galvanized steel or unlined steel (except stainless steel) to produce hydrogen gas that may form a highly combustible gas mixture which could flash or explode.

Hazardous Decomposition Materials (Under Fire Conditions): May produce gases such as oxides of carbon, nitrogen, and phosphorous.

National Fire Protection Association (NFPA) Hazard Rating:

Rating for this product: Health: 2 Flammability: 0 Reactivity: 0

Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Environmental Precautions: Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

Methods for Containment: Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.

Methods for Cleanup and Disposal: If dry, sweep or scoop up material and place into container for disposal. If wet, pump any free liquid into an appropriate closed container. Wash area with strong industrial detergent and water, absorb and sweep into container for disposal. Decontaminate tools and equipment following cleanup. See Section 13: DISPOSAL CONSIDERATIONS for more information.

Other Information: Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

7. HANDLING AND STORAGE

Handling:

Do not get in eyes or on clothing. Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove Personal Protective Equipment (PPE) immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Solutions of this product should be mixed and stored using only stainless steel, aluminum, fiberglass, plastic or plastic-lined containers. DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS. This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

Storage:

Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Keep container closed to prevent spills and contamination.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:

Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

Personal Protective Equipment:

Eye/Face Protection: To avoid contact with eyes, wear face shield, goggles or safety glasses with front, brow and temple protection. An emergency eyewash or water supply should be readily accessible to the work area.

Skin Protection: To avoid contact with skin, wear long pants, long-sleeved shirt, socks, shoes and chemical-resistant gloves. An emergency shower or water supply should be readily accessible to the work area.

Respiratory Protection: Not normally required. If vapors or mists exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.

General Hygiene Considerations: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

Exposure Guidelines:

Component	OSHA		ACGIH		Unit
	TWA	STEL	TWA	STEL	
Glyphosate	NE	NE	NE	NE	

NE = Not Established

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: White solid with slight odor.

Boiling Point: Decomposes @ 200°C

Density: 1.66 g/cc

Evaporation Rate: Not applicable

Freezing Point: Not applicable

pH: 2.14 (1% solution)

Solubility in Water: Soluble

Specific Gravity: Not determined

Vapor Density: Not applicable

Vapor Pressure: Not applicable

Viscosity: Not applicable

Note: Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

10. STABILITY AND REACTIVITY

Chemical Stability: This material is stable under normal handling and storage conditions.

Conditions to Avoid: Excessive heat. Do not store near heat or flame.

Incompatible Materials: Strong oxidizing agents: bases and acids. This product reacts with galvanized steel or unlined steel (except stainless steel) to produce hydrogen gas that may form a highly combustible gas mixture which could flash or explode.

Hazardous Decomposition Products: Under fire conditions, may produce gases such as oxides of carbon, nitrogen, and phosphorous.

Hazardous Reactions: Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION**Toxicological Data for Glyphosate Technical**

Data from laboratory studies conducted on a similar, but not identical, formulation:

Oral: Rat LD₅₀: >5,000 mg/kg

Dermal: Rabbit LD₅₀: >5,000 mg/kg

Eye Irritation: Rabbit: Moderately to severely irritating.

Skin Irritation: Rabbit: Non-irritating

Subchronic (Target Organ) Effects: Repeated overexposure to glyphosate may decrease body weight gains and effects to liver.

Carcinogenicity / Chronic Health Effects: Prolonged overexposure to glyphosate may cause effects to the liver. There was no evidence of carcinogenicity in animal studies using glyphosate. EPA has given glyphosate a Group E classification (evidence of non-carcinogenicity in humans).

Reproductive Toxicity: In laboratory animal studies with glyphosate, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals.

Developmental Toxicity: In animal studies, glyphosate did not cause birth defects in animals; other effects were seen in the fetus only at doses which caused toxic effects to the mother.

Genotoxicity: Glyphosate has produced no genetic changes in a variety of standard in vitro (bacterial cells) and in vivo tests using animals.

Assessment Carcinogenicity: None listed with ACGIH, IARC, NTP or OSHA.

See Section 2: HAZARDS IDENTIFICATION for more information.

12. ECOLOGICAL INFORMATION**Ecotoxicity:**

Data on Glyphosate Technical:

96-hour LC ₅₀ Bluegill:	120 mg/l	Bobwhite Quail 8-day Dietary LC ₅₀ :	>4,500 ppm
96-hour LC ₅₀ Rainbow Trout:	86 mg/l	Mallard Duck 8-day Dietary LC ₅₀ :	>4,500 ppm
48-hour LC ₅₀ Daphnia:	780 mg/l		

Environmental Fate:

In the environment glyphosate adsorbs strongly to soil and is expected to be immobile in soil. Glyphosate is readily degraded by soil microbes to AMPA (aminomethyl phosphonic acid) that is further degraded to carbon dioxide. Glyphosate and AMPA are unlikely to enter ground water due to their strong adsorptive characteristics. Terrestrially-applied glyphosate has the potential to move into surface waters through soil erosion because it may be adsorbed to soil particles suspended in the runoff. Aquatic applications registered for certain formulations may also result in glyphosate entering surface waters. Complete degradation is slow, but dissipation in water is rapid because glyphosate is bound in sediments and has low biological availability to aquatic organisms. These characteristics suggest a low potential for bioconcentration in aquatic organisms and this has been verified by laboratory investigations of glyphosate bioconcentration in numerous marine and freshwater organisms with and without soil. The maximum whole body bioconcentration factors for fish were observed to be less than 1X. Bioconcentration factors for sediment dwelling mollusks and crayfish tended to be slightly higher, but were always less than 10X. In addition, any residues accumulated in organisms were rapidly eliminated.

13. DISPOSAL CONSIDERATIONS**Waste Disposal Method:**

Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with application Federal, state or local procedures.

Container Handling and Disposal:

Nonrefillable Containers Without Outer Bag: Nonrefillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into processing equipment, then dispose of liner in a sanitary landfill or by incineration if allowed by state and local authorities, by burning. If burned stay out of smoke.

Nonrefillable Containers With Outer Bag: Nonrefillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into processing equipment, then dispose of liner in a sanitary landfill or by incineration if allowed by state and local authorities, by burning. If burned stay out of smoke. Offer the outer bag for recycling, if available.

Refillable Containers: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with pump 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. An empty container retains product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed. Completely empty package into formulation equipment. This package may be returned for refilling with this product. If not refilled, dispose of empty package in a sanitary landfill or by incineration as applicable.

14. TRANSPORTATION INFORMATION

DOT: Not Regulated

IMDG: Not Regulated

IATA: Not Regulated

15. REGULATORY INFORMATION

U.S. Federal Regulations:

TSCA Inventory: This product is exempted from TSCA because it is solely for FIFRA regulated use.

SARA Hazard Notification/Reporting:

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370): Immediate

Section 313 Toxic Chemical(s): None

Reportable Quantity (RQ) under U.S. CERCLA: None

RCRA Waste Code: None

State Information:

Other state regulations may apply. Check individual state requirements.

California Proposition 65: Not listed

16. OTHER INFORMATION

This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-ACCEPTED PRODUCT LABELING (attached to and accompanying the product container). This MSDS provides important health, safety and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of Federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, Nufarm Limited makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Nufarm Limited be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.

